Year 10 Evolution Chapt 3.4

WORDLIST: At Charles Variation When a advantage are become by called evolution formation interbreed more new occur on progressively provided so that these two variations ways   
  
\_\_\_\_\_\_\_\_\_, struggle for survival, selective \_\_\_\_\_\_\_\_\_ and inheritance of advantageous \_\_\_\_\_\_\_\_\_\_ formed the basis for \_\_\_\_\_\_\_ Darwin's theory of evolution \_\_ natural selection. It also \_\_\_\_\_\_\_\_ an explanation for how \_\_\_ species arise.

The \_\_\_\_\_\_\_\_\_ of new species is \_\_\_\_\_\_ speciation. There are two \_\_\_\_ in which speciation can \_\_\_\_\_. Phyletic evolution occurs when \_ population of a species \_\_\_\_\_\_\_\_\_\_\_\_\_ changes over time to \_\_\_\_\_\_ a new species. Branching \_\_\_\_\_\_\_\_\_ or divergent evolution is \_\_\_\_ common; in this case, \_ population is divided into \_\_\_ or more new populations \_\_\_\_ are prevented from interbreeding. \_\_\_\_ different selection pressures act \_\_ each population, different characteristics \_\_\_ selected for. Over generations, \_\_\_\_\_ new populations may become \_\_ different from each other \_\_\_\_ they can no longer \_\_\_\_\_\_\_\_\_\_ and produce fertile offspring. \_\_ this point, they have \_\_\_\_\_\_ two different species.

Part 2 Divergent Evolution

WORDLIST: At Divergent a are at different for is ocean population populations produce result so species such there they time to which with   
  
\_\_\_\_\_\_\_\_\_ evolution

Divergent evolution is \_ type of evolution in \_\_\_\_\_ new species evolve from \_ shared ancestral species. That \_\_, two or more new \_\_\_\_\_\_\_ share a common ancestor. \_\_ some point in history \_\_\_\_\_ has been a barrier (\_\_\_\_ as a geographical barrier, \_\_\_ example a mountain or \_\_\_\_\_) that has divided the \_\_\_\_\_\_\_\_\_\_ into two or more \_\_\_\_\_\_\_\_\_\_\_ and has also interfered \_\_\_\_ interbreeding between the populations.

Exposure of these populations \_\_ different selection pressures will \_\_\_\_\_\_ in the selection of \_\_\_\_\_\_\_\_\_ variations or phenotypes. Over \_\_\_\_, the populations may be \_\_ different that even if \_\_\_\_ were brought back together \_\_\_\_ would be unable to \_\_\_\_\_\_\_ fertile 129offspring. It is \_\_ this point that they \_\_\_ referred to as different \_\_\_\_\_\_\_. Speciation has occurred.

Part 3

WORDLIST: Darwin's The and are common divergent environment evolution from have many most of resulted to   
  
\_\_\_\_\_\_\_\_ finches are examples of \_\_\_\_\_\_\_\_\_ evolution. They share a \_\_\_\_\_\_ ancestor, but over time \_\_\_ generations, different selective pressures \_\_\_\_ led to the selection \_\_ different variations that are \_\_\_\_ suited to a particular \_\_\_\_\_\_\_\_\_\_\_ or available niche.

**Adaptive Radiation**

Adaptive radiation is said \_\_ have occurred when divergent \_\_\_\_\_\_\_\_\_ of one species has \_\_\_\_\_\_\_\_ in the formation of \_\_\_\_ species that are adapted \_\_ a variety of environments. \_\_\_\_\_\_\_\_ finches and Australian marsupials \_\_\_ two examples. Australian marsupials \_\_\_ thought to have evolved \_\_\_\_ a common possum-like ancestor. \_\_\_ photographs below shows examples \_\_ species that have arisen \_\_\_\_ a common ancestor.

**Part 4**

WORDLIST: Australian Convergent a as characteristics features have of selection the to   
  
\_\_\_\_\_\_\_\_\_\_ marsupials show adaptive radiation \_\_ they have evolved from \_ common ancestor but, due \_\_ different selection pressures, different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ have been selected.

**Convergent Evolution**

In divergent evolution, different \_\_\_\_\_\_\_\_\_ pressures lead to the \_\_\_\_\_\_\_\_\_ of different variations in \_\_\_\_\_\_\_\_\_ from a common ancestor. \_\_\_\_\_\_\_\_\_\_ evolution is the opposite. \_\_\_\_\_\_\_\_\_\_ evolution is the result \_\_ similar selection pressures in \_\_\_ environment selecting for similar \_\_\_\_\_\_\_\_ or adaptations. These adaptations \_\_\_\_ not been inherited from \_ common ancestor.

Part 5

WORDLIST: 130and Coevolution EXTINCTION UNDERSTANDING a and are at be being bird diversity features have may move nectar of on only or organism pollinate pollinator response some species that the   
  
\_\_\_\_\_\_\_\_\_\_\_

The evolution of one \_\_\_\_\_\_\_\_ can sometimes be in \_\_\_\_\_\_\_\_ to another organism. Examples \_\_ this coevolution include parasites \_\_\_ their hosts, or birds \_\_\_ plants. If you look \_\_ the features of birds \_\_\_\_\_\_ the flowers that they \_\_\_\_\_\_\_\_\_, you may notice that \_\_\_\_ birds have evolved specialised \_\_\_\_\_\_\_\_, such as beaks that \_\_\_ well suited for obtaining \_\_\_\_\_\_ for a flower with \_ particular shape. The plants \_\_\_\_ evolved flowers that may \_\_ of a particular colour \_\_\_\_ is attractive to its \_\_\_\_\_\_\_\_\_\_, and nectar that not \_\_\_\_ attracts but rewards the \_\_\_\_ for its task of \_\_\_\_\_ involved in pollination.

\_\_\_\_\_\_\_\_\_\_

Extinction is the loss \_\_ disappearance of a species \_\_ Earth. Extinction of a \_\_\_\_\_\_\_ may influence the evolution \_\_ another species, as it \_\_\_ provide the opportunity to \_\_\_\_ into the niche that \_\_\_ extinct species occupied. Extinctions \_\_\_ their effect on biological \_\_\_\_\_\_\_\_\_ are explored in SCIENCE \_\_\_\_\_\_\_\_\_\_\_\_\_: See you later, alligator.

***Copy the figures that explain covergent and divergent evolution see page129 of the text book***